



**Product Selector**

## **Ultra Heavy Duty**

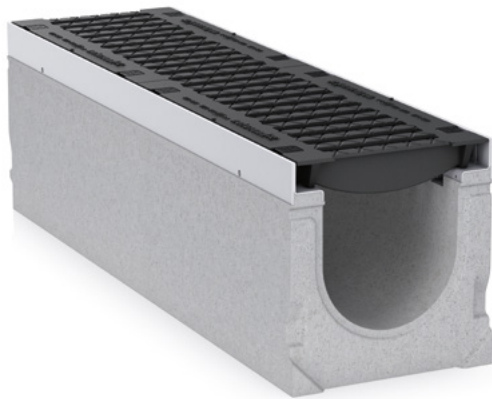
Linear drainage systems for environments subject to dynamic forces and extreme loads.

# World Leader

## Reliable Performance

A world leader in the manufacture of modular surface drainage systems, HAURATON drainage products have been supplied onto major projects within international markets for over sixty-five years.

We developed our first linear drainage system in 1956. Since that time the HAURATON brand has become known around the world as a benchmark for quality, reliability, durability and service.



## Environmentally Aware

HAURATON has environmentally sound production facilities, processes and procedures.

RECYFIX systems are manufactured from recycled Polypropylene (PP), which is 100% recyclable following life-time use.

HAURATON drainage systems can assist in the assignment of credits based on the BREEAM and LEED rating systems. HAURATON maintains an Environmental Management System according to DIN EN ISO 14001:2015

Refer to HAURATON for further information.





# Surface Drainage

## Product Range

HAURATON offers a wide range of external surface drainage systems suitable for a variety of project applications, including residential, commercial, municipal, industrial, military, transport and major infrastructure projects.

**FASERFIX** - Strong and durable drainage channels in Fibre-Reinforced Concrete (FRC).

**RECYFIX** - A robust, high-performance range in corrosion-resistant composite materials (PP, PA-GF). HAURATON is the innovator and market-leader in this field and provides the widest range of commercial-grade composite channel systems available.

**SPORTFIX, DACHFIX, DRAINFIX CLEAN** and **RECYFIX TRAM** are specialist ranges available for unique applications.

Systems can be supplied with a variety of functional, decorative and HeelSafe gratings or with discreet 'longitudinal' slot channel designs, for load-class applications from A 15kN up to F 900kN, offering significant choice and flexibility.

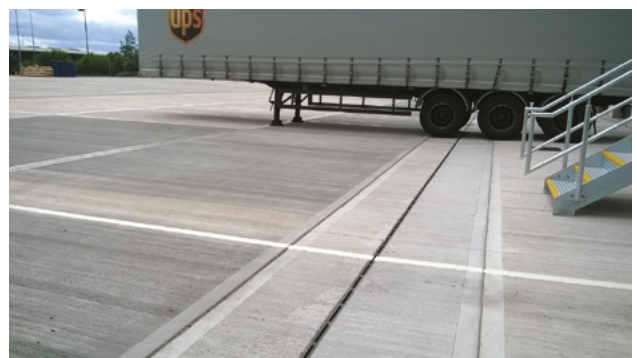
With superior design and engineering, HAURATON sets the industry standard with high-quality, visually aesthetic and technically innovative products that meet project requirements and complement modern building and landscape design.

## Product Selectors

Our Product Selector's have been designed to provide industry professionals with a quick, simple and clear guide to choosing the appropriate HAURATON system to suit their project requirements.

Each Product Selector include's project applications with similar needs regarding loading and system performance:

- Roof Terraces, Balconies & Facades
- Public Realm & Shared Space
- Car Parks & Commercial
- Industrial
- Ultra-Heavy-Duty
- Airports
- Ports & Terminals



# Ultra Heavy Duty

**Linear drainage systems for environments subject to dynamic forces and extreme loads.**

## System Requirements

'Ultra-Heavy-Duty' environments typically include the following characteristics:

- High loads; F 900 (wheel, static, impact and dynamic).
- Intense traffic patterns (variety, frequency, speed, acceleration, braking, turning, angled approach).
- Varied wheel type and configuration (small, solid, pneumatic, single, multi-tyre, single-axle/double-axle/multi-axle, single and multiple undercarriage arrangements, continuous track etc).
- High surface water run-off (extensive catchment areas).
- Corrosive environments (saline conditions, ground sulphates, high humidity, extreme temperatures, strong UV radiation, road gritting salts, de-icing solutions, chemicals etc).
- High-performance surfaces (concrete, high-spec asphalt, heavy-duty block paving).

HAURATON systems included in this Product Selector meet and exceed the requirements for 'Ultra-Heavy-Duty' project applications.

## Typical Applications

Projects where 'Ultra-Heavy-Duty' environments exist include:

- Airports
- Military Bases
- Oil & Gas Terminals
- Transport Infrastructure
- Industrial Area Infrastructure
- Ports, Docks, Container Terminals

\*HAURATON 'Ultra-Heavy-Duty' systems are not suitable for use on highways in locations that are subjected to fast moving traffic.







# FASERFIX SUPER

A strong, durable and reliable grated channel system in fibre-reinforced concrete, with a proven structural design for superior resistance to dynamic forces and extreme loads.

**FASERFIX SUPER** has a higher specification compared to alternatives, for assured performance and reduced maintenance costs during all stages of the projects life. Refer to product brochure for detailed information.

## Key Features

### Material

- Fibre-reinforced concrete

### Loading

- Channel body load rated to F 900 (EN 1433: 2002)

### Channel Widths

- 100, 150, 200, 300, 400 & 500 mm

### Channel Lengths

- 1.0m & 500mm (selected depths)

### Grating Options

- Inlay design
- D 400, E 600 & F 900 (EN 1433: 2002)
- Spheroidal ductile iron GJS 500-7 'EN1563'
- Slotted grating
- GUGI-mesh grating
- Solid cover
- KTL 'cathodic dip' coating (optional)

### Channel Configuration

- Constant-depth (same channel depth)
- Built-in fall (150, 200, 300)
- Stepped-fall

### Edge Detail

Two options:

- Galvanised steel S275J263+Z
- Spheroidal ductile iron GJS 500-7 'EN1563' (KTL 'cathodic dip' coated).





# FASERFIX BIG BL

Cast from high-performance 'HRS' cement concrete, **FASERFIX BIG BL** has a mega-monoblock design incorporating the channel surround, base and steel reinforcement cage within a single rigid 'concrete beam' structure for increased strength, stability and high resistance to impact loads.

**FASERFIX BIG BL** is estimated to be ten times quicker to install (F 900 locations) compared with alternative systems. Refer to product brochure for detailed information.

## Key Features

### Material

- 'HRS' cement concrete

### Loading

- System load rated to F 900 (EN 1433: 2002)
- \*Units tested up to 2000kN without failure

### Channel Widths

- 100, 150, 200 & 300 mm

### Channel Lengths

- 4.0m & 1.0m

### Grating Options

- Inlay design
- D 400, E 600 & F 900 (EN 1433: 2002)
- Spheroidal ductile iron GJS 500-7 'EN1563'
- Slotted grating
- GUGI-mesh grating
- Solid cover
- KTL 'cathodic dip' coating (optional)

### Channel Configuration

- Constant-depth (same channel depth)

### Edge Detail

- Galvanised steel S275J263+Z







# MONOTEC ULTRA

**MONOTEC ULTRA** incorporates an elevated grating structure (100mm high) in spheroidal ductile iron GJS 500-7, designed for maximum strength and durability to withstand dynamic forces and heavy-duty loads (F 900).

The 'grating-to-channel body' connection sits deep underground, achieving a monoblock type structure (no removable gratings) when installed for high-security and improved safety for vehicles and pedestrians. The grating is fully retained and supported by the channel concrete encasement through extended grating flanges (no loads / no forces imposed on channel body). Refer to product brochure for detailed information.

## Key Features

### Material

- Recycled Polypropylene (PP) composite

### Loading

- MONOTEC ULTRA system load rated to F 900 (EN 1433)

### Channel Widths

- 200mm & 300mm

### Channel Length

- 1.0m

### Grating Options

- Elevated grating structure (non-removable)
- Extended grating flange supported by channel concrete encasement
- Slotted grating design; anti-slip surface
- Spheroidal ductile iron GJS 500-7 'EN1563'

### Channel Configuration

- Constant-depth (same channel depth)

### Edge Detail

- Elevated grating in spheroidal ductile iron GJS 500-7 'EN1563'
- Durable edge; impact resistant

\*Ideal for level crossings





# RECYFIX HICAP F SLOT CHANNEL

Manufactured from high-grade Polypropylene (PP) composite, **RECYFIX HICAP F SLOT CHANNEL** is a high-capacity linear drainage system used to provide efficient and cost-effective drainage and attenuation within extensive hard surface areas. Refer to product brochure for detailed information.

## Key Features

### Material

- Modified Polypropylene (PP) Composite
- Some components in Polyamide (PA-GF)

### Loading

- System load rated to F 900 (EN 1433: 2002)

### Channel Sizes

- HICAP F 1000, 2000, 3000, 5000, 8000 & 10000

### Channel Lengths

- 1.0m & 1.145m (RECYFIX HICAP F 10000)

### Grating Options

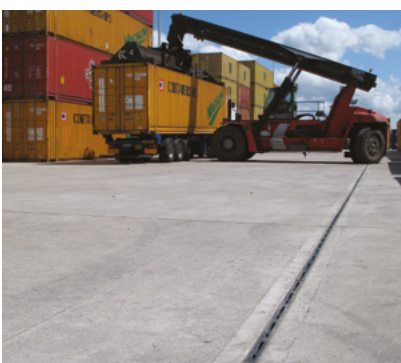
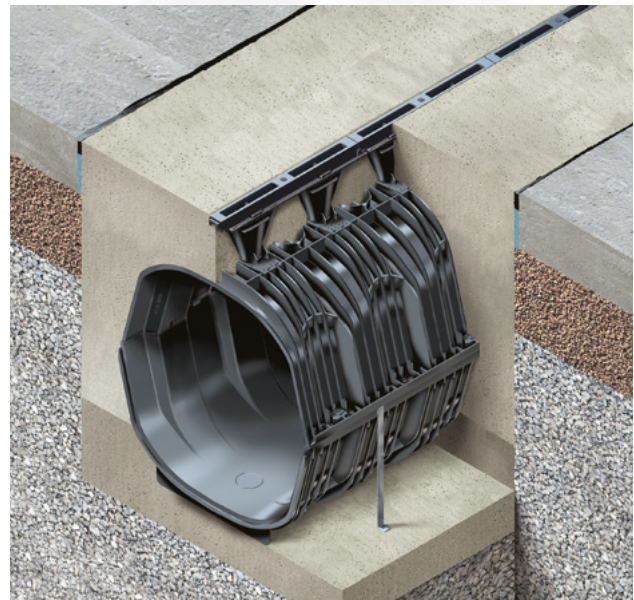
- Retained grating design (non-removable)
- D 400 & F 900 (EN 1433: 2002)
- Spheroidal ductile iron GJS 500-7 'EN1563' (KTL 'Cathodic Dip' Coated)

- Slot 14mm
- Slot 28mm
- Mesh 13/28mm
- Slot 6mm

### Channel Configuration

- Constant-depth (same channel depth)
- Stepped-fall

\*This system is especially resilient to dynamic forces caused by the turning/twisting action of wheels.





# Total Support

## Projects Team

HAURATON provides close support to ensure drainage design, specification and installation is quick, efficient and cost-effective.

A team of regional, specification and project managers are available to assist industry professionals at every stage of the construction process. Refer to HAURATON for contact details ([www.hauraton.com](http://www.hauraton.com)).

A multinational company, HAURATON has production facilities, subsidiary offices, technical engineers and partners located in many countries and regions of the world.

HAURATON has the knowledge, experience and resources to manage and support all projects successfully, regardless of location.

## Design Service

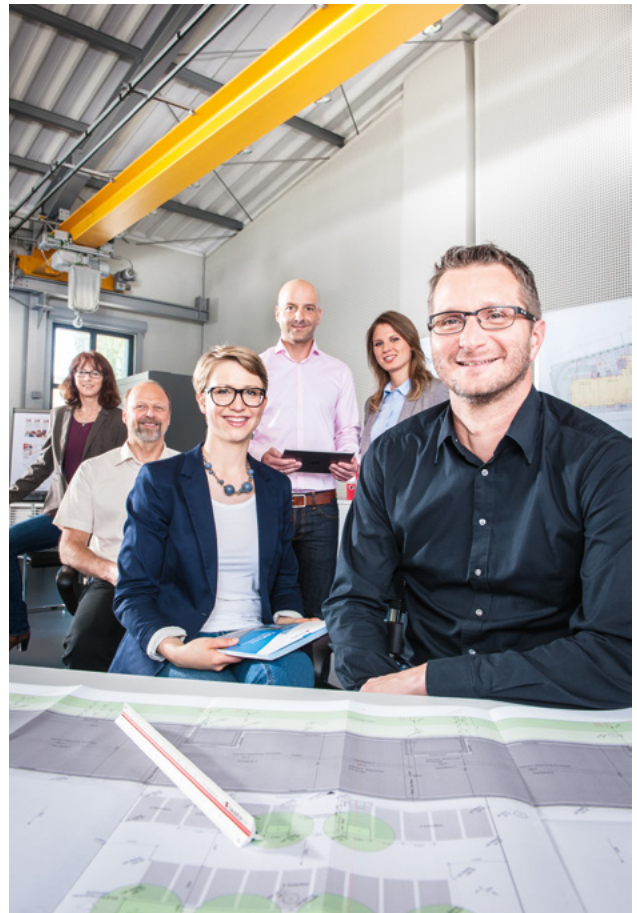
HAURATON offers a comprehensive design service for all product ranges. This is available free of charge and without obligation.

Our approach is to provide innovative 'value-engineered' designs to achieve the most cost-effective drainage solution for the benefit of all parties.

Design proposals can be provided within 24 - 48 hours, depending on the size of the project. Information offered includes:

- Hydraulic calculations for each channel run
- System configuration drawings
- Parts list schedules
- Product dimension drawings
- System installation drawings
- Product and material technical datasheets
- Other technical and support information

Feel free to contact us should you require assistance.



HAURATON provides a comprehensive design service, which is free of charge.

The formula used within the software is based on that determined by Gauckler-Manning-Strickler. Accuracy has been verified by physical testing of HAURATON systems within a hydraulic discharge test flume, replicating and evaluating hundreds of flow scenarios.

**HAURATON DesignSoftware**

User-friendly and free-of-charge, our web-based application 'DesignSoftware' provides construction industry professionals with quick, simple hydraulic analysis, channel sizing, project design and product specification for the company's core range of surface drainage systems (for landscape, commercial and civils projects) whilst working on their own desk-top and lap-top computers.

HAURATON 'DesignSoftware' provides engineers with the flexibility to create their own drainage designs, with just three clicks to a hydraulic calculation.

Follow the link below to register and use the software:

<https://hydraulicdesign.hauraton.com/register/>





# Quality Assurance

## High Standards

HAURATON products and procedures bring quality assurance.

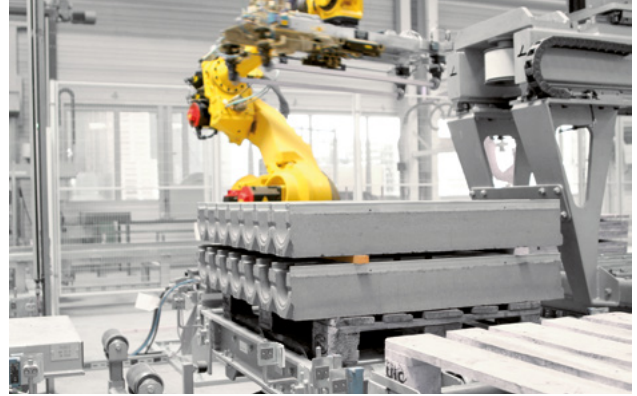
The company operates in accordance with EN ISO 9001: 2015. Production within modern, mechanised facilities in Europe is carefully monitored and controlled to achieve consistent product quality.

HAURATON drainage channels have been independently tested for load capacity and watertightness in accordance with the European Standard EN 1433: 2002. Systems are CE marked for quality assurance.

## Proven Performance

Supplied for over sixty-five years and thirty years respectively, **FASERFIX** and **RECYFIX** systems have proven performance, having been used successfully on major projects around the world. Individual project case studies are available from HAURATON.

HAURATON has a reputation for products of the highest quality, durability and reliability.



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